

Applicants : James L. Overbeck et al  
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### REMARKS

Applicants respectfully request reconsideration of the application identified above. Claims 66, 69-76, 80-84 and 86-87 are pending in the application; claims 66, 69-71, 74-75, 80-83 and 86 are amended; and claims 133 and 134 are added. Applicants respectfully traverse the rejections as conceivably applied to the amended and new claims.

#### I. Summary of the Invention

The invention as defined in amended independent claims 66 and 80 is directed to a one-piece shield for an optical measurement device. The one-piece shield includes an integral reference area that is disposed in a field of view of the measurement instrument. The one-piece shield also includes means for attaching or removably mounting the body on the measurement instrument. With the unique construction of the shield, the reference area is consistently positioned in the field of view, and need not be separately supported by the patient or the patient's teeth.

#### II. Allowable Subject Matter and Claim Objections

Applicants note with appreciation Examiner Smith's statement that claims 74-76 and 86-87 are allowable, and that claims 69-73 would be allowable if rewritten in independent form. Allowed independent claims 74 and 86 are amended to correct grammatical errors and to eliminate features unnecessary for patentability. Claims 69-71 are rewritten, and it is submitted that claims 69-73 are now allowable. Applicants note, however, that now-independent claim 69 does not recite the specific features of the reference area in original independent claim 66 because the Applicants believe the claim is patentable without these features. Claims 70 and 71 are amended to change means-plus-function language to specific structural language.

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Finally, previously presented claims 80-84 were objected to. These claims have been corrected to overcome the objection.

III. Specification Objection

The specification was objected to because it included insufficient margins which resulted in the mutilation of the specification. As requested, a clean copy of the original specification with appropriate margins is submitted at Exhibit A. No new matter is entered in the specification.

IV. Supplemental Information Disclosure Statement

Applicants note that the Action does not confirm the Examiner's review of the references listed on page 6 of 7 of the Disclosure Statement filed on March 5, 2001. A copy of this Disclosure Statement and the Certificate of Mailing is attached as Exhibit B. Applicants respectfully request confirmation of the Examiner's consideration of references on page 6 of 7 in this Statement.

V. Art Rejections Based on U.S. Patent 5,177,694 to Graham

As previously presented, claim 80 was rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,177,694 to Graham, and claims 66 and 81-84 were rejected under 35 U.S.C. §103(a) as being unpatentable over Graham.

Graham discloses a camera used to take electronic images of teeth. In Fig. 9, Graham shows a light box 25 that defines a diffusing chamber 14 and includes a flexible plastic mouthpiece 17 which bears against the front of the patient's teeth and retracts the patient's lip 18. Fig. 3; Col. 4, Lns. 9-12. Graham also discloses a color reference strip 12 structure that is *separate* from the light box 25. This separate strip 12 includes a plastic body 34 and blocks 35

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that must be gripped and held in place by a patient's teeth when the camera is used to take digital images of the teeth. Figs. 5-6; Col. 4, Lns. 51-52. In use, the light box 25 is pressed against the patient's mouth so that the strip 12 is positioned in the mouth 15 of the box 25, and so that locating pins 19 position the strip 12 in front of the teeth. Col. 4, Lns. 13-14.

Applicants respectfully submit that Graham does not anticipate the subject matter of amended independent claims 66 or 80 because Graham does not disclose (1) a one-piece unitary or integral shield body or (2) a reference area that is *integral with* the shield tip and in the field of view. Instead, the reference strip 12 of Graham is merely positioned in the mouth 15 of the light unit--in no way is it integral with the light unit. Indeed, it would be impractical to *secure* the Graham color reference strip to the light unit because the strip must include porcelain shades that are at least close to the color of the patient's teeth. The separate *unsecured* strip 12 of Graham necessarily provides dentists with variability in selecting and comparing different color reference strips to teeth of varying colors and shades.

Claims 81-84 depend from amended independent claim 80, and therefore are allowable for at least the reasons noted above.

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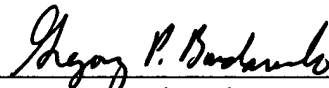
CONCLUSION

In view of the above amendments and these remarks, Applicants respectfully submit that the present application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

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